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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/624,246	07/24/2000	Paul Clarke	1131-0444P	6209

7590 02/27/2002

Birch Stewart Kolasch & Birch LLP  
P O Box 747  
Falls Church, VA 22040-0747

EXAMINER

LOPEZ, CARLOS N

ART UNIT	PAPER NUMBER
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1731

8

DATE MAILED: 02/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/624,246	Applicant(s) CLARKE ET AL.	
	Examiner Carlos Lopez	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16,21 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 14 December 2001 is: a) ☒ approved b) ☐ disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                 | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____   |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)        | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ | 6) <input type="checkbox"/> Other: ____                                     |

## **DETAILED ACTION**

### ***Response to Amendment***

The amendment filed on 12/14/02 has been entered as Paper No.7. The rejections made under 35 U.S.C 112, second paragraph, to claims 17-20 is withdrawn, applicant has cancelled claims 17-20. Drawing objections to figure 17 and 18 is withdrawn. Applicant has amended the specification to recite element 48 and has proposed drawings changes that would obviate the previous drawing objection of figure 17.

### ***Claim Rejections - 35 USC § 112***

**1)** Claims 1-16 and 21-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-16 and 21-22 rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: tipping paper and filter cigarette. What part of the filter is the tipping paper surrounding?

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2) Claims 1, 4-12, 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Otto (DE 3403281). Otto discloses a filter assembly comprising a cylindrical filtering core (14); a tubular filter sheath (22) surrounding said core and between said core and sheath, passages spaced circumferentially around said core and extending continuously between the two ends of the filter assembly (Figure 1). As for claim 4, Otto discloses means for introducing air into the passages, perforations 26. As for claims 5 and 8, the core comprises a plurality longitudinal grooves at the outer peripheral surface thereof, defining said passages with the inner peripheral surface of said sheath (22). As for claims 6, 9, 11, and 12, the grooves are provided by a corrugated wrapper (20) between the filter core and sheath. As for claims 7 and 10, the sheath (22) is porous (Page 8, lines 5-10). As disclosed above Otto anticipates the above claims

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3) Claims 2-3, 14, 15, and 21 are rejected under 35 U.S.C. 103(a) as obvious over Otto (DE 3403281). Otto is silent disclosing the thickness of the sheath, the ratio of the sheath thickness to the diameter of the core and the total cross-sectional area of the passages. However, the claimed parameters are known variables in the tobacco art

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that affect the overall ventilation of a filter and/or removal efficiency of the filter. Hence, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify known parameters in the tobacco art to obtain the desired filter ventilation or removal efficiency.

As for claim 21, the number of passages would depend on the desired ventilation.

As for claim 15, a second filter tip 12 as disclosed by Otto, aligned with the filter assembly. While it is silent disclosing the airflow resistance of said tip, the claimed airflow resistance is conventional for tobacco filters.

Table 1, of Morifuji et al (US 4,488,563) discloses the claimed airflow resistance.

The indicated allowability of claim 13 is withdrawn in view of the newly discovered reference(s) to Gonterman (US 4,649,943). Rejections based on the newly cited reference(s) follow.

**4)** Claims 13 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otto (DE 3403281) in view of Gonterman (US 4,649,943). Otto is silent disclosing openings on the tubular corrugated element (20). However, Gonterman teaches of having perforations of the corrugated wrapper forming the passages on the circumference of the filter core in order to provide an even dilution of the smoke being inhaled by the smoker (Bridging paragraph of Columns 3 and 4). At the time invention was made, it would have been obvious to a person of ordinary skill in the art to have

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made perforations on Otto's corrugated paper as taught by Gonterman to improve even dilution of the inhaled smoke.

***Response to Arguments***


Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is (703) 605-1174. The examiner can normally be reached on 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Silverman Stanley can be reached on (703) 308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7718 for regular communications and (703) 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

C.L  
February 24, 2002

  
**JOSE FORTUNA**  
**PATENT EXAMINER**